

ABSTRACT

A motor controller includes a position sensing device having a position sensor that senses a magnetic pole of a motor, a driver for driving the motor, and a wiring section that feeds a power supply voltage from the driver to the position sensing device. The position sensing device is equipped with a superposed-wave transmitter coupled to a first end of the wiring section and a serial converter for converting a signal of the sensing device into a serial signal. The driver is equipped with a superposed-wave receiver coupled to a second end of the wiring section and a parallel converter for converting the serial signal into a parallel signal. The foregoing structure allows superposing the information about switching a phase-excitation for driving the motor onto the wiring section formed of a pair of cables, i.e. two cables, so that the information is transmitted.